

Spotting the Wolf in Sheep's Clothing: Predatory Open Access Publications

Chandler Wilson Carroll, BA

The recent announcement from the Netherlands calling for scientific journals to accelerate their transition to open access (OA) business models¹ strengthens the global push toward free access. This shift to OA journals also includes the United States,² Great Britain,³ and China.⁴ The resulting expansion of OA publications⁵ highlights the importance of researcher awareness of OA practices and policies. This is critical, for among the many diverse and confusing names given to the different alternative forms of OA publishing, there is an option that often hides darker intentions: predatory OA publishers.

Predatory OA publishers exploit researchers and the OA system through operating as mock OA journals, willing to publish the work of whoever will pay, and disregarding the peer review system (BOX 1).⁶ Taking advantage of the rapid expansion of OA publications in the past decade, predatory OA publishers have grown tremendously in number, from 18 documented publishers in 2011 to 1028 in 2016.⁷ Thankfully for the scientific community, the presence of these journals has not gone without notice. Many researchers have explored the issue, running “stings”⁸ and compiling lists that recognize predatory OA publishers.^{9,10}

In 2015, predatory OA publishers were a hotly discussed topic in editorials.^{11–18} Since the potential issues with OA publishing were identified, researchers have been studying, building definitions, and trying to understand what distinguishes a predatory OA publisher from a nonpredatory OA publisher. For the most part, this goal has been achieved. However, one thing is missing from many of these investigatory publications: all explain what predatory OA publications *do*, but few offer recommendations for how to recognize them in day-to-day interactions. This Perspective compiles a list of tools for identifying and avoiding predatory OA publications (BOX 2).

Many researchers may have come into contact unknowingly with predatory OA journals in a simple, easily misunderstood way: through e-mail invitations. Predatory OA publications are known for sending invitations via e-mail to researchers, asking them to submit their research for publication.¹⁹ Although these

requests can elicit mixed feelings of humor and irritation,^{12,20} they can have deceitful motives. Often these invitations build the researcher up, while neglecting to mention the article processing charges required for publication. It is only once a researcher's article has been accepted for publication that the invoice arrives.⁸ In many cases, researchers have already signed away their rights to the paper when these fees are demanded, which prevents retraction of the paper by the authors.²⁰ When researchers receive cold calls from OA publishers, it is important that they proceed with caution and investigate the journal thoroughly.¹⁹

In the literature, researchers are most commonly directed toward Jeffrey Beall's list of “Potential, Possible, or Probable Predatory Scholarly Open-Access Publishers.”⁷ In short, this list provides the names—1028 as of May 7, 2016—of publishers that, by Beall's criteria, are of questionable quality. While the list has been criticized for being too quick to condemn¹⁹ and punishing publications from developing countries for imperfect English,²⁰ it is generally well received and considered valuable.^{20,21} Bohannon's 2013 “sting” on predatory OA journals,⁸ which sent a flawed paper to more than 300 OA journals to test their peer-review process, found that 255 journals accepted the paper. The list includes OA journals for all subject matters, including 74 medical education-oriented publications from the combined Predatory Publisher and Stand-Alone Journal lists.

Another list noted by researchers is the Directory of Open Access Journals (DOAJ).^{6,9} The DOAJ, like Beall's list, looks at the quality of OA publications but instead identifies only OA publications of good quality.^{10,22}

While Beall's list and the DOAJ are extensive and supported by a long list of inclusion criteria, it is advised by many,^{20,23} including Beall himself,⁷ that researchers review other sources in addition to these lists to get a better sense of why a publication might or might not be predatory. One such reference is the Eigenfactor Index of Open Access Fees.²⁴ Developed by Jevin West and Carl T. Bergstrom from the University of Washington and by Ted C. Bergstrom from the University of California, Santa Barbara, the Eigenfactor Index measures the cost-effectiveness of an OA publication by analyzing its article processing

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Box 1 Definition of Open Access Publications

Open Access Publications

- Are funded by the author
- Are free to the public
- Are peer reviewed
- Are uploaded to online repositories upon publication
- Are correctly attributed to authors²⁵
- Make publication part of the cost of doing research

Box 2 Common Practices of Predatory Open Access Publications

- Cold calling authors through e-mail¹⁹
- Neglecting the peer review system^{11–18}
- Expediting the review process to deliver accepted verdicts faster^{11–18}
- Manipulating authors to sign away their rights to the work at the submission stage²⁰

charges and its article influence score.²² West, Bergstrom, and Bergstrom have studied more than 700 OA journals indexed by Thomson Reuters and developed a graph that plots each journal based on its article influence and article processing charges. Their work can help investigators spot potential predatory OA publications by comparing journals.

Although many of the recommendations for avoiding predatory OA publications are rooted in common sense, these steps may not be apparent to those new to scientific publishing. Thus, mentors must alert and educate junior investigators, particularly residents and fellows.²⁴ A 2013–2014 survey of new medical and veterinary writers²⁶ found that of the 145 respondents, 33 (23%) knew what a predatory journal was, 34 (23%) were aware of the DOAJ, and only 7 (5%) were familiar with Beall's list. It is up to experienced researchers to assist novice investigators in becoming familiar with predatory OA publisher practices, and to help them recognize the quality of the journals. There are many practical ways to evaluate the legitimacy of an OA journal. For instance, in his article, Bohannon⁸ mentions researching the addresses and editors of potentially predatory publications. If a journal isn't *where* it says it is, there's a good chance it isn't *what* it says it is, either. Identifying inconsistencies on journal websites can be as simple as searching the Internet for a name or address and can save researchers time, money, and inappropriate uses of their names.¹⁹

It is clear that predatory online journals seek submissions for 1 reason: profits. They use unethical and unscrupulous tactics to attract authors, particularly inexperienced authors without access to mentors. Ultimately, researchers must resist the urge to publish quickly and easily.⁶ Avoiding the temptation for a quick publication with minimal work builds better articles, publications, and, eventually, better general knowledge. Authors must use every available resource at their disposal to avoid these traps.

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Chandler Wilson Carroll, BA, is Medical Editor and Writer, Publications Office, Academic Operations, Baylor Scott & White Health.

Corresponding author: Chandler Wilson Carroll, BA, Baylor Scott and White Research Institute, MS-HP-102, 2401 South 31st Street, Temple, TX 76508, 254.771.4849, fax 254.771.4890, chandlerwcarroll@gmail.com